

Application No. 09/584,363  
Amendment dated May 9, 2005  
Reply to Office Action dated February 8, 2005

## Remarks/Arguments

Claims 3 to 7, 9 to 22, 27, and 29 to 32 remain pending in the application.

The Examiner rejected claims 3 to 7, 9 to 22, 27, and 29 to 32 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,466,711 B1 to Laor et al. (Laor) in view of U.S. Patent No. 6,445,841 to Gloeckner et al. (Gloeckner). Applicant respectfully traverses the rejection under 35 U.S.C. 103(a).

Independent claims 3 and 22 have been amended to recite "in such a manner that the predetermined input path does not require focusing means", and independent claim 20 has been amended to recite "in such a manner that a part of the input optical path comprised between the assigned ingress area and the assigned optical switching element does not require focussing means." The paths *not requiring focusing means* recited in claims 3, 20 and 22 correspond, for example, to the path between spot a3 and switching element 3/3 in Fig. 3B, i.e. the path between demultiplexer 40 and the plane of MEMS device 10 of Fig. 3B.

Applicant submits that the invention as claimed in amended independent claims 3, 20 and 22 cannot be arrived at directly and without difficulty by a worker having ordinary skill in the art having regard to Laor and Gloeckner for at least the following reasons. Gloeckner teaches a matrix switch having multiplexers (1731c-d) and demultiplexers (1731a-b) in communication with collimator arrays (1714, 1716, 1718 and 1720) as shown in Fig. 17 with the related description starting at column 14. There, Gloeckner discloses connecting input/output fibers to the collimator arrays and disposing multiplexers and demultiplexers between the input/output fibers and the collimator arrays. Gloeckner teaches away from independent claims 3, 20 and 22 which recite the limitations that no focusing means is present between the optical demultiplexer and an assigned ingress area. Combining Gloeckner with Laor, Laor disclosing a planar array optical switch, could not result in the present invention as claimed in any of the independent claims 3, 20 and 22.

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Claim 3 has been amended to include the preposition "for" at the fourth and eleventh lines. The claim has also been amended to correct for the antecedent problem regarding "a plane of said input matrix".

Claim 4 has been amended by adding the words "a" and "of" at the second line.

Claim 6 has been amended at line four to recite "for separating each input multichannel signal into component wavelengths according to an angle of incidence of said input multichannel signal on said demultiplexer." Applicant submits that original claim 6 erroneously recited "according [to] an area of incidence" which is inconsistent with the description of the invention. Support for currently amended claim 6 can be found at least at page 9, fourth paragraph, of the description. Applicant submits that neither Laor nor Gloeckner teach or suggest an optical demultiplexer and input ports arranged for separating an input multichannel signal into component wavelengths according to an angle of incidence of the input multichannel signal on the demultiplexer. Therefore, Applicant submits that claim 6 is neither anticipated nor obvious in view of Laor and of Gloeckner individually or in combination.

Claim 9 has been amended to recite "for combining all wavelengths arriving in a certain area of incidence on said multiplexer **within an output port**" instead of "within an output multichannel port".

Claim 10 has been amended to cancel the expression "along said predetermined output path".

Claim 11 has been amended to recite "optical elements arranged along said predetermined output path" and "egress area on said output port".

Claim 20 has been further amended to correct for the antecedent problem regarding "a plane of said input matrix".

Claim 22 has been further amended to correct for the typographical errors regarding "DWDM" and "all-optical". The claim has also been amended to correct for the antecedent problem regarding "a plane of said input matrix".

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Claim 32 has been amended to correct for the typographical error regarding "said switching block".

No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

It is submitted that this application is now in condition for allowance, and action to that end is respectfully requested.

Respectfully submitted,

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